

INTRODUCTION

I. STATUS OF CLAIMS

The status of the claims in this application is:

A. Total Number of Claims in the Application

The claims in the application are: Claims 35-74.

B. Status of All of the Claims

Each of the pending claims 35-40, 42-50, 52-74 were rejected under 35 U.S.C. § 102(e) as being anticipated by Daniel et al. (U.S. Patent No. 6,171,327). Claims 41 and 51 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Daniel et al. (U.S. Patent No. 6,171,327) in view of Heyn et al. (U.S. Patent No. 5,201,757). Claim 38 was rejected under 35 U.S.C. § 103(a) as being unpatentable over Daniel et al. (U.S. Patent No. 6,171,327).

C. Claims on Appeal

The claims on appeal are each of pending claims 35-74.

II. GROUND OF REJECTION TO BE REVIEWED ON APPEAL

Whether claims 35-40, 42-50 and 52-74 were improperly rejected under 35 U.S.C. § 102(e) as being anticipated by Daniel et al. (U.S. Patent No. 6,171,327). Whether claims 41 and 51 were improperly rejected under 35 U.S.C. § 103(a) over Daniel et al. (U.S. Patent No. 6,171,327) in view of Heyn et al. (U.S. Patent No. 5,201,757). Whether claim 38 was improperly rejected under 35 U.S.C. § 103(a) over Daniel et al. (U.S. Patent No. 6,171,327).

III. ARGUMENT

The Examiner has made several erroneous statements concerning the operation of the catheter system disclosed in the Daniel patent which would lead one to the incorrect conclusion that the Daniel patent anticipates the claims at issue. However, when one looks at the way in which the recovery sheath (150) moves with respect to the inner catheter (172) in the catheter

system disclosed in Figures 20 and 21 of the Daniel patent, it becomes clear that the recovery sheath 151 is not moved distally over the distal portion of the inner catheter (172) to retrieve the filter (21).

The Examiner states the following at page 3 of the Examiner's Answer:

The recovery sheath (151) tracks over the distal portion of the inner catheter to retrieve the filter. Figure 19 illustrates this function with a different embodiment of the device, but the embodiment in Figure 20 also performs this function.... As evidenced by the fact that **the recovery sheath (151) is capable of deforming the distal end (180, 280) of the inner catheter when pushed distally to retrieve the filter**, the distal portion of the inner catheter is more flexible than the recovery sheath (151). Emphasis added

However, the Examiner's position concerning how the filter is retrieved is incorrect. In the embodiment disclosed in Figures 20 and 21, as well as the embodiment of Figures 18 and 19, the recovery sheath (150) is not pushed distally to retrieve the filter (21), as stated above by the Examiner, but rather, it is the inner catheter (172) that is moved proximally, with the recovery sheath remaining stationary, which results in the retraction of the filter (21) into the retrieval housing (152) of the recovery sheath (150). As such, the recovery sheath is not moved distally and cannot track over the distal portion of the inner catheter to retrieve the filter (21).

The Daniel patent discloses the manner in which the filter is retrieved as stated at Column 8, lines 60-65:

FIG. 21 is a view of catheter 150 and filter 21 of FIG. 20, wherein **filter 21 and insert 178 have been moved proximally** such that sheath 182 has deflected in a distal direction. To complete the withdrawal of filter 21 from the vessel, **insert 172 and filter 21 are moved proximally until filter 21 is collapsed and substantially drawn into housing 152**. Emphasis added

Therefore, contrary to the Examiner's assertions, the recovery sheath (150) is not pushed distally over the end of the inner catheter (172) to retrieve the filter (21). The embodiment of Figure 18 and 19 move in a similar fashion to retrieve the filter and further support the position that the inner catheter (172) is moved proximally, rather than the recovery sheath being moved distally, to retrieve the filter.

In use, the recovery catheter (150) and inner member (172) of the catheter system shown in Figures 20 and 21 of the Daniel patent are moved simultaneously until the tapered tip (180)

reaches the filter (21), as is shown in Figures 20 and 21. The proximal handles of the catheter system prevent the tapered tip (180) from moving any further distally from the end of the recovery sheath (150) but allows the inner member (172) and insert (176) with its tapered tip (180) to be moved proximally, while the recovery sheath (150) remain stationary, in order to retract the filter back into the housing (152). As such, the recovery sheath (150) does not and cannot track over the distal portion of the inner member, as recited in the claims at issue. The proximal retrieval action of the catheter system of the Daniel patent is quite different from what is being claimed, and is incapable of performing the same function. For this reason alone, the Daniel patent fails to disclose the basic structure recited in the claims.

The Examiner has made still other incorrect statements appearing in the Examiner's Answer, concerning the operation of the catheter system disclosed in Figures 20 and 21. In addressing the specific claim language at issue, the Examiner has interpreted much too broadly certain claim language appearing in the claims. The Examiner states the following at page 4, lines 11-14 of the Examiner's Answer:

The examiner considers "*distal portion*" to be any portion of the inner catheter that is distal to the most proximal point. Any distal portion of the inner catheter that extends beyond the distal end of the sheath meets this requirement.

The Examiner is correct in this statement. Appellant has consistently argued that only the enlarged tapered tip (180) is the only portion of the inner member which extends distally from the distal end of the recovery sheath (150). The Examiner, however, has taken an overly broad and, frankly incorrect position, concerning what part of the inner catheter (172) constitutes the distal portion. The Examiner states the following at page 8, line 2-4, of the Examiner's Answer:

For clarification, the examiner considers "*distal portion*" to be any portion of the inner catheter that is distal to the most proximal point, not just the enlarged tip (180).

Appellants strongly disagree with the Examiner's position. The claims are clear that the distal portion is that portion of the inner catheter which extends distally beyond the distal end of the recovery sheath when the inner catheter and recovery sheath are being moved together along the guide wire. Therefore, in the device disclosed in figures 20 and 21 of the Daniel patent, only this small tapered tip (180) extends distally from the distal end of the recovery sheath (150) when the sheath (150) and inner member (1720) are advanced along the guide wire. Therefore, the

Examiner's position that a longer portion of the inner catheter (172) constitutes the "distal portion" is incorrect.

The Examiner's position regarding the term "distal portion" is also incorrect as it relates to the movement of the inner catheter (172) relative to the restraining sheath (150). The Examiner makes the following incorrect statements concerning the operation of the embodiment of Figure 20 and 21 of the Daniel at page 8 of the Examiner's Answer:

An infinite number of "*distal portions*" can be defined by changing the point along the tube that defines the separation of proximal and distal portion. Therefore, a "*distal portion*" with a length at least as long as the filter can be defined on the Daniel inner catheter.....Daniel shows the inner catheter (172) to include a "*distal portion*" that extends distally of the sheath (151), **and the extent to which the inner catheter extends beyond the sheath can be changed by moving the tubes relative to one another.....**Emphasis added

However, the extend to which the inner catheter (172) can extend beyond the recovery sheath (150) is limited by the control handles attached to each proximal end of the inner catheter (172) and recovery sheath (150). As stated above, the most distal positioning of the inner member (172) relative to the recovery sheath (150) is shown in Figures 20 and 21. The control handles prevent the tapered tip (180) from moving any further distally from the distal end of the recovery sheath (150) catheter since the insert (176) would be pushed out of the housing (152), defeating the function of the insert (176). Since the control handles only allow the inner member (172) to be retracted proximally, only the tapered tip (180) ever extends distally beyond the distal end of the recovery sheath (150). Accordingly, the "tubes" cannot be simply moved relative to one another to permit a larger length of the inner catheter (172) to extend distally from the recovery catheter (150), as contended by the Examiner.

In interpreting the term "sufficient length," the Examiner has taken the position that the term is significantly broad to encompass any length of tubing. The Examiner states the following at page 8, lines 18-21:

Clearly, the inner catheter of Daniel has "*sufficient length*" to allow the sheath to track over it, because this is how the device functions to retrieve the filter. The length of the "*distal portion*" can be changed by simply choosing a different point along the length of the catheter.

Again, as addressed above, the recovery sheath (150) does not and cannot track over the distal portion (180) of the inner member (172). Also, the length of the distal portion shown in the Daniel patent, i.e. the tapered tip (180), can only be shortened, not extended, from the length shown in Figures 20 and 21 as the inner catheter (172) is proximally retracted. Therefore, the Examiner's position is incorrect. Moreover, the claims language recites a distal portion of sufficient length to allow the recovery sheath to track there over to reduce the possibility that the recovery sheath will straighten the body vessel. Therefore, the term "sufficient length" must be long enough to achieve this function. Firstly, the tapered tip (180) of the Daniel device does not function as a distal portion of "sufficient length" since the recovery sheath (150) does not track over it. Secondly, given its small size, the tapered tip portion (180) is so short that it barely extends out of the housing (152) of the retrieval catheter (150). Accordingly, due to its lack of size, this tapered tip portion (180) of the Daniel device fails to help prevent the body vessel from straightening as catheter system is advanced along the guide wire to collapse the filter and does nothing to prevent the retrieval catheter (150) from straightening the body vessel as it is deployed.

Appellant also contend that the Examiner has taken an unduly broad and unreasonable interpretation of the term "length of tubing" in context with the Daniel catheter system. The pending claims recite that the distal portion of the inner catheter is made from a "length of tubing." The tapered tip (180) can hardly be considered a "length of tubing" as it is merely the tapered end of a transversely enlarged insert (176) which function is to fill the void of the housing (152) in order to prevent the distal end (157) of the recovery catheter from "snowplowing" into the wall of the body vessel as the catheter is advanced over the guide wire. Therefore, Appellants believe that this tapered tip (180) does not constitute a "length of tubing" as this term is used and described in Appellant's specification.

Accordingly, it is submitted that independent claims 35, 45 and 54 and therefore all claims depending therefrom avoid anticipation and that the rejection of claims 35-40, 42-50 and 52-67 and 70-74 under 35 U.S.C. § 102(e) should be reversed.

As addressed above, Daniel et al. fails to disclose the basic structure which requires the inner catheter to have a distal portion including a length of flexible tubing having sufficient